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DR. COALE'S PRIZE DISSERTATION ON FRACTURES.

[Continued from page 76.]

Fractures of the Shaft of the Femur.—Though in our tabular view we made no subdivision of the fractures of the shaft of the femur, we find that the point at which the lesion occurs makes a great difference in the readiness with which we can control the displacement of the fragments.

Fractures taking place within three inches of the top of the trochanter are more difficult to treat successfully, and are more likely to foil all the care and skill of the surgeon, than any other. In intra-capsular fractures of the neck and in fractures of the trochanters, cures are not to be expected. In impacted fracture of the neck or of the condyles, the failure may be laid to the great violence received, and the surgeon escapes censure. In the other fractures, with common care, he effects a cure, but fractures just below the trochanter may be caused by comparatively slight accidents, and despite every attention and exertion the patient often leaves the surgeon's hands a cripple for life—not forgetting to bestow some back-handed blessing upon his medical attendant every time he puts on his high-heeled shoe or takes up his cane to go forth halting upon his way. The causes of this peculiar and exceeding difficulty in treating fractures in the neighborhood specified, are these.

In fractures higher up, there is no muscle attached to the upper piece to draw it out of its situation, and we have command over the lower piece and can bring it into its proper place. In fractures nearer the middle of the shaft, the length of the upper piece gives us command over it, besides which the vasti externus and internus being attached to it, though they cause us trouble by approximating the two fragments and making the ends override each other, tend to prevent the upper from being drawn very much out of the line of the axis of the limb. When, however, the fracture takes place high up, two strong muscles, the iliacus internus and psoas, have unlimited power to draw the superior fragment forward and upward, and the pectineus gives it an inward cant, whilst its small size prevents our obtaining a *point d'appui* upon it. We cannot wholly govern its motions with bandages, compresses or splints.

We have hitherto said nothing about bandages and compresses, for several reasons. We have purposely left much to the instinct and common sense of the surgeon: to that instinct, without which we might tell him much more and neither make him wiser nor his patient fare better, and with which, to descend into minuter details would be useless.

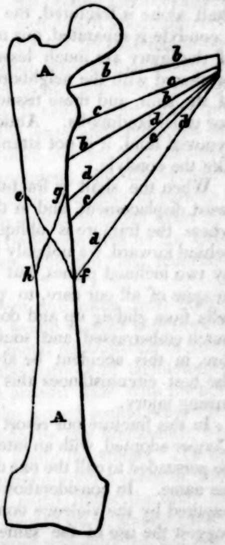
This instinct will tell him that the wood of which a splint is to be made should be as light as possible consistently with the requisite strength; that bandages should be of a breadth proportioned to the size of the limb; that they should only be used to a sufficient extent to fulfil the object, and that beyond this every turn is hurtful; that compresses should be made of as soft and elastic a substance as we can get. Besides this, we hold that bandages should never be used when they can be avoided, and in the fractures already treated of none were necessary except those already mentioned or implied in our description of the apparatus used.

In the fracture we now treat of, the limb has to be constricted quite firmly just over those vessels by which it discharges most of the fluids that have been circulating in it—the femoral vein and the numerous lymphatics in its neighborhood. Without some precautions an accumulation would take place beyond this constriction, and the limb become very tumid. To prevent this, we begin our treatment by enveloping the whole leg and thigh from the toes upward in a bandage of Scultetus. This we prefer to a roller, because, if properly applied, it is just as efficient, and when it becomes slackened, which any bandage will do sooner or later from the wasting of the limb, it can be re-adjusted without disturbing the splint, which would have to be entirely removed to reapply a roller. We may mention here, that the great imperfection of the Scultetus seems to be that the ends work loose. This may be prevented entirely by giving them a little daub with starch as each is tucked in.

For reasons which are evident after what we have said in explaining the difficulties of treating this fracture, a straight splint will not serve us. It would restore the proper length to the limb, but it could have but little effect in keeping the upper fragment in apposition with the lower. We therefore decidedly adopt the semi-flexed splint after the type of Rowe's. To this the limb is attached, flexing it at right angles to the pelvis, whilst extension is carefully preserved. Over the extremity of the upper fragment a compress is laid, and upon this, extending half way down the anterior and internal aspect of the thigh, is placed one of Gooch's flexible splints, securing it by two bands around both limb and inclined plane. In the application of this splint the apparatus of Rowe has a decided advantage over the broader and more bulky inclined plane of Cooper, as with the latter this anterior splint must be applied before placing the limb upon the inclined plane, and of course before the extension is made permanent; there is consequently a liability to displacement and to an alteration of the bearings of the compress. As the thigh is to be flexed at right angles with the pelvis, the body should be raised at an angle of about 30°, which would be much more comfortable than to have the trunk horizontal and the thigh perpendicular. From the beginning of the treatment the splint must be suspended, and to increase the extension the point of suspension must be so placed that the suspending cord will have an inclination to the foot of the bed, and therefore a tendency to draw the limb in that direction. The time required to complete a cure is about six weeks.

The causes of our difficulties in treating fractures near the middle of the shaft may be gathered from our short sketch of the anatomy of the part, and therefore do not require a more special enumeration. The direction of the fracture much affects these difficulties, it being evident that in a transverse one the fragments can be more readily held in apposition and prevented from overlapping than when the fracture is oblique, furnishing two inclined planes which may readily glide over each other. Oblique fractures also are affected by the direction of the obliquity. If the obliquity range from above downward and from without inward, a reference to the anatomy of the pectineus and the lesser and middle adductors will show that these muscles will then act with great effect in drawing the superior fragment inward; but if the fracture range from within outward, the influence of the same muscles would be almost null, whilst the long adductor would act upon the lower fragment at so acute an angle as to have but little effect in drawing it out of the line of axis of the limb.

Fig. 6.



This will be readily understood by a reference to the accompanying diagram.

A A.—The Femur.
b b b b.—The outlines of the Pectineus.
c c c c.—The outlines of the Adductor Minimus.
d d d d.—The outlines of the Longus seu Medius.

Now it is evident that if the fracture is in the direction of the line *e f*, the superior fragment can be readily displaced and to some extent, whilst if it is in the direction of the line *g h*, the result will be a slight bending of the bone inward, without much displacement of the fragments from their relative position.

The splint we advise is the same modification of Desault's by Flagg already quoted, replacing it as before in order to lessen the restraint of our patient as soon as we possibly can (say the twentieth day) by the light suspended inclined plane of Rowe. As for bandages, rollers, &c., we will thank M. Mayor for the advice, and utterly discard them except where the single turn of a *broad* roller or handkerchief (which will not produce sudden or severe constriction) and a compress is necessary to prevent the obliquity of one or both of the fragments.

Adjust properly what bandage may be wanted to hold in place the apparatus, or a fitly-proportioned compress, and no constriction will be produced that would require the enveloping of the limb with bandages, except in the last-mentioned fracture. Omitting the use of these, we gain much in cleanliness, in saving of trouble, and in the well-being of our patient. We can have the whole limb under our eye, and with convenience make what application of lotions, &c., may be necessary, and moreover the limb may be subjected to those gentle and continued frictions, with the naked hand, so agreeable and soothing to a fractured limb constrained and fatigued by a splint.

Fractures of the Lower End of the Femur.—Fractures of the lower end of the femur we have subdivided into those just above the condyles, and those through the condyles into the joints, separating one or both condyles from the shaft.

It may be said that the first of these properly belongs to fractures of the shaft, but they are produced by the same kind of violence as the last; the two are frequently complicated in the same individual, and much the same treatment is required for both. These lesions are always produced by heavy falls upon the knee, received in a direction so oblique as to avoid fracturing the neck by contre-coup, and yet so severe as to rend apart the expanded spongy tissue of the condyles. Where the shaft alone is fractured, the diagnosis is made with facility; but where a condyle is separated, our means of judging the precise nature and extent of the injury are much lessened, because the violence must necessarily be shared with the neighboring soft parts, bursæ and synovial membranes of the joint, and these tissues soon become so tumefied as to destroy all our usual landmarks. Amidst this tumefaction and effused bursal and synovial fluid, it is not strange that we should be unable to detect a piece like the condyle.

When the shaft is fractured transversely, the broad opposing surfaces resist displacement, and in this way much assist us in our treatment; but where the fracture is oblique, ranging from above downward and from behind forward, we not only have the difficulties before explained as caused by two inclined planes, but the point of the upper fragment is very apt, in spite of all our care, to project sufficiently forward to prevent the patella from gliding up and down; the motions of the knee are consequently much embarrassed and sometimes entirely impeded. We should, therefore, in this accident be always very cautious in our prognosis, as under the best circumstances this must be considered a formidable and unpromising injury.

In this fracture our resort must be to the straight splint, which even Cooper adopted, with an internal splint so like Dr. Flagg's that we cannot be persuaded to call the one used at the Massachusetts General Hospital by his name. In consideration of the assiduous local treatment almost always required by the violence done to the parts around in this injury, we would suggest the use of the same contrivance mentioned in speaking of impacted fracture of the neck—substituting a steel rod ellipse or oblong for the wooden splint in the neighborhood of the fracture. Great care must be paid to the proper support of the knee, but otherwise the splint is to be applied as usual, using, according to our principles, compresses where they may be required to prevent chafing, and bandages where they may be necessary to attach the splints or give support to some part or compress, *but no where else.*

At the end of a month the inclined plane of Rowe may be substituted —first putting it on perfectly straight. Passive motion by flexing the splint should be commenced as soon as possible, but the arrival of this period can only be told by actual experiment of the surgeon. The few cases on record hold out no cure under two and a half months, and some extend nearly to the fourth—a duration which must be considered rather as required by the extent and complication of the lesion than by any backwardness at renovation on the part of the bone, which at this point seems to possess all vitality requisite for speedy reproduction.

Fractures of the condyles are also accidents of which our prognosis must be unfavorable. The violence originally causing the lesion must necessarily be great, and of course be shared by the very sensitive articular tissue. The joint itself is opened, and if these difficulties are overcome we have a nice task to unite the detached condyle so accurately as not to impair the delicate mechanism of the joint.

In the treatment of this fracture our first precautions must be directed to getting rid of the tumefaction, which, as with the last, is liable to be very great. Having accomplished this, Sir Astley Cooper advises applying a roller, and then a wet piece of pasteboard about sixteen inches long and wide enough to reach from the edge of the patella on one side, down underneath the limb, up to the other edge of that bone, confining it with another roller. Bransby Cooper would substitute the starched bandage for this. We would suggest Rowe's splint, used perfectly straight at first. This would give all the ease and comfort of either of the others; is just as readily applied; does not prevent the application of lotions, leeches, &c. &c.; can be suspended; and, finally, will enable us, when the proper time arrives, to submit the limb to passive motion without further disturbance than what we choose to inflict upon it. This accident is rare, and the records of our profession give us but little information upon it. The cases related were, like the last, tedious, requiring three months for a cure.

Compound Fractures.—In these severe and often fatal injuries, the only modification of apparatus which we would suggest is the one already twice mentioned—the substitution of a metal continuation of the splints in the neighborhood of the wound for the purpose of facilitating the application of local remedies, and in the present case with the additional view of preventing the discharge from the wound soaking into the splints and befouling them. This can be made by any blacksmith, whilst we are reducing the swelling sufficiently to apply the splints. To keep the bed clean, the injured limb should be placed upon a piece of India rubber cloth. This, instead of passing as usual under the other limb and letting the fluid run into the depression caused by it, should come up between the thighs and be laid over the sound one, which it will not incommode if the cloth be very thin.

Occasional Modifications of Apparatus.

Though we have given what we deem to be, under ordinary circumstances, the best apparatus for the treatment of the several fractures of the thigh, there are occasions which demand a modification of the appliances mentioned or a substitute for them.

Thus we have recommended the inclined plane after the type of Amesbury, Rowe, &c. Instances may occur, when this, simple as it is, can neither be obtained already made nor manufactured, and our next choice, then, would be the starched bandage. This we apply as already directed. In making this splint or bandage, for it is both, we have found it very useful to introduce the common ironmonger's paper between the layers of the roller. Cut the paper into strips an inch wide, or even less; paste them over on one side, and double them together for a few minutes until the paste can soak in and thoroughly soften them. They can then be perfectly adapted to any surface, even when very convex and irregular, and are particularly serviceable when we want to strengthen a part, saving us the necessity of carrying back the roller to that part and making an ungainly-looking splint. In all cases where this apparatus is used, we would urge its being slit open in front. If properly made, this will not impair its strength, and it gives the limb an opportunity of swelling without being constricted, and gives us an opportunity of daily examining it. This splint does not possess one great advantage which the inclined plane offers. We cannot exercise the limb with passive motion while it is on; we must therefore, when the time comes, remove it and replace it again after exercise.

The starched bandage is very useful with children, and where the limb has previously been crooked or otherwise deformed. With the very young we experience a difficulty in keeping the limb perfectly still, and in preventing those motions which must derange any splint. In deformed and crooked limbs we of course cannot adapt a straight splint. In both of these cases the starched bandage answers admirably. With babies and very young children there is an inconvenience attending its use, which may not at first suggest itself, but which produces great trouble —they urinate upon it, and of course soften it. For this Tavignot advises varnishing it, but they will not let it dry sufficiently to varnish it. In such a case we had great success with the following method. Making proper extension ourselves, an assistant prepared a bed of plaster of Paris. Into this we laid the child (2½ years old), taking a half mould from the crest of the ilium to half way down the leg. In five minutes it *set*, and the child was taken out. In this mould we made a cast of that half of the hip, thigh and knee, and to this cast we applied a starched bandage, precisely as if it had been a real limb. Of course it was but a half circumference—one side being flat. When dry, we cut off this flat side, and were thus enabled to remove the starched splint from the cast. This splint, which of course was perfectly shaped to the half of the limb, we then varnished with copal varnish, making it thoroughly waterproof.

The plaster splint we have never seen tried. One evident advantage it possesses is the perfect uniformity of pressure established all over the limb—a uniformity which the greatest skill in applying a roller cannot equal. The size and weight of the material is the greatest objection to its use. A very interesting case is given in Cooper's work on Dislocations and Fractures, in which this splint was used in a case of oblique fracture of the thigh with unexpected and perfect success. In this case, before the plaster hardened the anterior fourth was removed throughout its whole length from the groin to the instep.

The late improvements in the preparation and manufacture of India rubber hold out expectations that it may be usefully applied in the form of bandages, which, though sufficiently firm to fix the limb, would still by their elasticity permit any little increase by swelling or decrease by wasting, without pain to the patient or derangement of the apparatus. This remains to be determined by experiment.

[To be continued.]

DEATH FROM THE PRESENCE OF A FOREIGN BODY IN THE BRONCHUS.

By James Sheppard, M.D., M.R.C.S.L., Stonehouse, Devon.

On Tuesday, Feb. 18th, at 10, A. M., I saw Mr. J. L——, aged 73, a gentleman much respected, to whom I had been summoned, in consequence of his alarm at having swallowed a piece of ginger some hours previous to my visit, which he considered had "stuck" in his throat, on its passage. It appeared that Mr. L. had retired to his bed on the previous night at his ordinary time, in his usual health. According to a custom of many years, he had gone to sleep with a piece of ginger in his mouth. About two o'clock in the morning, he was awoke by a violent cough, of a suffocating and spasmodic character; he felt as though the ginger had "stuck" in his throat, and he could neither get it up nor down. His cough continued without intermission, for about two hours, when he felt the ginger move and pass into the "chest." Since then, he had slept at intervals, and though a good deal exhausted, he appeared, at the time of my visit, to be pretty comfortable, notwithstanding an occasional cough. His countenance was tranquil, his pulse calm, his respiration natural. He expressed himself to be tolerable, with the exception of a tightness across his chest; this we both referred to the concussion of the cough. He complained of no local pain in the chest, as might have been expected if such a stimulating substance as ginger had escaped into the lungs. But the question was urgent, where was the ginger? Was it in the bronchi or in the stomach? There was no symptom to warrant the conclusion that the ginger was in the lungs. That it had irritated the epiglottis, or the lining membrane of the larynx, in the morning, was certain, but as to its position in the body I felt myself unable to determine. For years he had been the occasional subject of asthma, and had also an habitual cough. I ordered him to take a little castor oil, and determined to wait for the result. About three, P. M., they sent for a little cough medicine, saying Mr. L.'s cough was rather troublesome. I accordingly sent him a little pectoral mixture, and a Dover's powder to take at night.—Eleven, P. M., was called out of bed to see him. He was very restless, and exceedingly anxious; his countenance also betraying great anxiety. His skin was hot, his tongue dry, his respiration hurried, and he still complained of pain across his chest. His cough had gradually become more troublesome; he was altogether very ill.

Percussion.—Both sides sounded equally well.

Auscultation.—But little vascular respiration audible on either side, less on the left than on the right. On the left side, bronchial respiration and crepitation was audible in several abnormal situations. On the right side, there was large mucous crepitation heard all over the posterior portion of the chest. More fremitus felt on the right than on the left side, and the left side was also immovable to a considerable degree in respiration.

He had expectorated a good deal of mucus during the day, which presented no unusual appearance. His voice was manifestly altered, but it was not the alteration of laryngitis, but of debility; perhaps it may better be described as a failure of the voice rather than as an alteration. I ordered him to omit the mixture, and to take a saline aperient with ipecacuanha; the oil had operated twice, but no ginger had been seen. I ordered also a mustard poultice.

If the ginger was in the chest, where was its seat? or was it a case of uncomplicated bronchitis? These questions were of a most important character, but could not be solved in the present state of the case. I believed the ginger was in the bronchi, but could not decide satisfactorily. There was but little vesicular respiration audible in either lung; the left lung was nearly immovable; the right bronchial tubes were in a state of inflammation. Did the ginger plug up the left bronchi? This was the case, or the left lung was in a state of chronic disease. There was less fremitus on the left side, yet bronchial sounds were abnormally audible in some places, as though there was consolidation or engorgement of the left lung; yet the fremitus was less on the left than on the right. The fremitus being less, and the left side moving so little in respiration, indicated that the ginger was in the left bronchus. What, then, was the cause of the inflammation in the right? I thought it probable, if the ginger was in the left bronchus, that (as it was described as a piece as large as the distal phalanx of the little finger) it might project into the cavity of the trachea, and propagate its irritation by continuity of structure; or that mucus impregnated with ginger might have passed into the right side, and so have caused inflammation.

February 19th, half past nine, A. M.—Countenance much altered, betokening great depression; his pulse had given way and had become weak and thready; his tongue was dry and brown, his skin cool, his breathing anxious, and he complained of a good deal of pain in his chest, especially at the posterior part, between the shoulders; he was perfectly sensible, but a little inclined to coma. I feared that sinking was at hand. I ordered a blister to his chest, and commenced stimulants. At three, P. M., I again saw him; he was much lower; decided collapse had appeared. At four, P. M., at the request of the family, I met my friend Dr. Tyndal in consultation; he was still sinking, and at five, P. M., he died.

I was ordered to make a *post-mortem* examination of the body by the coroner, which I did at three o'clock in the afternoon of Feb. 21st, and

I regret exceedingly, that from certain very unpleasant circumstances, resulting chiefly from the disinclination of the relatives to permit the body to be examined, I was prevented from making as perfect and as minute an examination as I otherwise might have done. The jury were also waiting in the room below for my evidence. My friend Mr. Carter was present, and assisted me in the examination of the body. The lungs were so completely tied down to the parietes of the chest that it was impossible to break down the adhesions without also tearing the structure of the lungs. On laying open the larynx and trachea, nothing particular presented itself; the mucous membrane bore occasional marks of congestion, but inflammation was absent. When we arrived at the bifurcation of the trachea, at the very upper part of the right bronchus, was the fatal ginger, nearly if not quite on a level with the point of bifurcation. The ginger was swollen and soft, and on squeezing it, a bloody mucus escaped. In this condition it measured an inch and a quarter in length, half an inch across at its widest part, and about three-eighths at its narrowest, which was also its middle. Both lungs were loaded with dark blood; partly, I apprehend, from impeded circulation, partly from gravitation, &c., after death, and partly from congestion during the last hours of life, during the stage of collapse. The cellular structure of the lungs was much altered from its natural appearance, the left lung especially. On cutting into it, a quantity of semi-purulent mucus oozed out in large quantities from every cell, and there were marks of bronchitis on the right side.

If my patient had been young and healthy, I do entertain a hope that his life might have been spared, for the vital powers would have been better able to endure the shock, and to sustain disease longer; added to this, the diagnosis would have been clearer. The question also presses urgently whether, if younger, and with healthy lungs, some means might not have been adopted, some expedient resorted to, for his relief; for if there be a case demanding the exercise of all the ability and all the energy of the profession, it is surely such an one as this, in which, by such a simple mechanical (?) cause, the life of a valued fellow-creature was sacrificed and prematurely lost. The slight specific gravity of the ginger was against the idea of its being moved by gravity above, especially in its swollen state: but if the ginger be permitted to remain, it must cause death; would it not be advisable, if such a substance as ginger is clearly demonstrated to be in the chest, to open the trachea, as low down as possible, and to introduce an instrument to excite the irritation of coughing, in hopes of dislodging the substance, in order that it may be seized if possible? but if this fails, I would recommend, bearing in mind that the alternative is certain death, that a long and very fine canula, enclosing a sharp stilette, with a barbed point, should be introduced through the opening, which might be passed without touching the sides of the bronchial tubes; if resistance be experienced, the stilette might be carefully protruded *continually*, withdrawing a little to try if the prize was caught; a stilette without a barb might be first tried.

In the case I have described I regret only one circumstance, and that is, that I was not applied to in the morning, when the ginger *was sticking* in his throat, for then, if the ginger had not entered the larynx, it might have been extracted. Not long since, I was called to a boy, in imminent danger; he had a "whistle" in his throat; I could feel it with my finger, but could not, of course, grasp it. I tickled his fauces with my finger, and the whistle was ejected with force.—*London Lancet.*

ON PHYSOMETRA.

By Thomas Barbour, M.D., Professor of Obstetrics, &c., in the Medical Department of Kemper College.

As tympanitis uteri is a rare affection, and, more especially, as the possibility of its existence has been questioned by some distinguished authorities, among whom may be mentioned Professor Meigs, of the Jefferson Medical School, who, in his edition of M. Columbat's able work on the Diseases of Females, declares that it is very doubtful whether such a condition can occur, I beg leave to communicate to the profession four unequivocal cases which have come under my observation; the 1st, that of Mrs. W., of Nashville, Tenn., in 1833; 2nd, that of Mrs. M., of Columbia, Tenn., in 1835; 3d, that of Mrs. N., of Nashville, Tenn., who consulted me in 1842; and 4th, that of Miss Y., of Giles county, Tenn., in 1842.

As all of the above cases were very similar in character, I deem it unnecessary to detail each separately, but will simply state the prominent symptoms which particularly characterized the whole, and offer a few suggestions as to the pathology and best treatment of this very singular malady.

There was very great impairment of the digestive organs, manifested by anorexia, acidity of stomach, flatulence, and vitiated or defective biliary secretion; the bowels were very irregular, the discharges being sometimes rather consistent and clay-colored, but most generally serous or mucous, and frothy and whitish; and there was the most distressing languor and debility. The phenomenon, however, which chiefly attracted my attention, and which has given name to the affection under consideration, was the generation of a vast amount of gas in the cavity of the uterus, which was frequently discharged, *involuntarily*, with a considerable report, which circumstance rendered it extremely disagreeable for the females to be in company. Whenever the body was suddenly moved, the passage of the gas, *per vaginam*, was obvious to the patients, and quite audible at some distance to others: the uterus occasionally became greatly distended with the accumulated gas, but would subside immediately after repeated discharges induced by exertion. There was no doubt, whatever, as to the source of the gas, the females themselves being convinced that it passed *per vaginam*; but, independently of the evidence afforded by sensation, the fact that it always was discharged *involuntarily*, was, to my mind, satisfactory proof of its existence in the uterine cavity.

In regard to the pathology of this curious affection, I would remark, that it *seems* to consist in chronic irritation of the mucous membrane, and relaxation of all the tissues of the uterus, associated with, perhaps dependent on, great impairment of the chylopoietic viscera.

It is difficult to explain how, under the above circumstances, gas is formed in the cavity of the uterus; it may be owing to the decomposition of retained secretions, or other matters, as has been suggested; or, it may be the result of direct secretion from the mucous membrane. Reasoning from analogy, and from the absence of any evidences of the existence of retained matters in the uterus, I decidedly incline to the latter opinion.

The leading indications of treatment are, to improve the biliary and other secretions by means of mild alterants and aperients; to allay the irritation of the alimentary canal, and restrain excessive discharges when they exist, by means of anodynes and astringents; and to invigorate the digestive organs and general system by appropriate tonics.

If the alvine discharges are somewhat consistent but clay-colored, or of a muddy or otherwise vitiated appearance, one or two pills, according to the following formula, administered every night, or every other night, would produce an excellent effect:—R. Mass. hydrarg., aloes, rhei, āā ½ dr., made into 24 pills. If, however, the discharges are serous or mucous, and whitish or greenish, attended with pain, the following prescriptions will be found very useful: 1st—R. Mass. hydrarg., plumb. acet., ext. krameriæ, āā ½ dr.; opii grs. xv., made into 24 pills, of which one may be given every fourth or fifth hour. 2d—R. Hydrarg. c. creta, dr. i.; gum arabic, dr. ii.; plumb. acet., dr. ½; tinct. opii acet., dr. i. to ii.; tinct. krameriæ, oz. i.; aq. menth. pip., oz. iii.; dose, a dessert-spoonful every fourth or sixth hour.

As tonics, I prefer the muriated tincture of iron, in the proportion of 20 drops, three times a day, in the infusion of the wild cherry-tree bark; or sulphate of quinine, in solution, as follows: sulph. quinæ, scr. i.; elix. vit., dr. i.; aq., oz. ii.; dose, a teaspoonful three or four times daily.

In addition to the above means, it is advisable that the patient should take gentle exercise daily in the open air; and once or twice a day, a tepid shower-bath. The diet should be light and *nourishing;* and a little good port wine will promote convalescence.

Under the above plan of treatment, all the cases I have referred to recovered entirely.—*Missouri Medical Journal.*

FATAL CASE OF PUERPERAL FEVER—AUTOPSY, &c.

By C. S. Magoun, M.D., of Wilkinson Co., Miss.

The subject of this case was a negress, aged 18 years, of a robust habit and sanguineous temperament. She was purchased in New Orleans December 22d, 1844, and came to this place on the night of the 23d. She was immediately taken in labor, which was not tedious, difficult, or attended with any unpleasant symptoms. She had apparently completed the full period of gestation, and soon gave birth to a child of full size, healthy and vigorous. On the morning of the 25th, Wednesday, a dose of castor oil was given with a view of opening the bowels in order to prevent any disposition there might be to take on fever. The oil acted on the bowels in the evening, and she appeared as well as usual at bedtime. During the night she became thirsty, but made no complaint of any pain or distress; she called frequently for water through the night, but being refused by the servants in attendance, she got up and satiated her thirst. She obstinately refused to let the child be put to the breast in spite of all persuasion, but no delirium or aberration of mind was noticed. Thursday morning her owner, Dr. R. T. L., a medical practitioner of experience, went in to see her in consequence of her refusing to nurse the child, having been informed that she was obstinate and sullen, and not expecting to find her with fever or any disease of serious import. He now found her pulse from 140 to 160 per minute, small and easily compressible; extremities rather below the natural temperature; body hot and dry; comatose, and insensible to all external impressions; abdomen nearly natural to the feel; the uterus well contracted. Prescribed venesection, but pulse sank under it, and it was discontinued after the abstraction of four ounces. Cups were applied to the abdomen, although no tenderness was apparent; stimulants, blisters and sinapisms applied to the extremities, &c., but with no visible advantage. The pulse increased in frequency, respiration became more hurried and laborious, the extremities cold, the pupils dilated and immovable, and death closed the scene at about 4 in the afternoon.

She was suffering, when purchased, with cough and great hoarseness, and spoke in a low, compressed, stridulous voice, apparently with great effort. This state was said to be a "*bad cold*" of a few days' standing; the symptoms were those resembling common influenza or catarrh.

Autopsy, 18 *Hours after Death*—The weather being very cold. The thorax was first examined; the lungs were healthy; the pericardium contained about two ounces of serum, in other respects the heart and its appendages were in a normal condition. Anterior to the trachea and near its bifurcation, was felt a tumor, which on being removed proved to be about the size of a hen's egg, hard, and unyielding, composed or formed of several glands united by a fibro-cartilaginous substance somewhat granulated in appearance. Many of the glands in the vicinity of this tumor were also enlarged and indurated. The irritation and compression of this tumor directly upon the air passages would seem to quite satisfactorily account for the cough and catarrhal symptoms. On opening the abdomen, the peritoneum was found deeply injected, and showed marks of intense inflammation; a small quantity of serum was effused into the abdominal cavity; the anterior folds of the small intestines and the fundus of the uterus, showed marks of inflammation. The uterus was not quite as well contracted as it should have been; the spleen was about three times its natural size and weight, hard, brittle, and easily broken down with the fingers. The other organs of the abdominal cavity were healthy. The head was not examined.

Queries and Remarks.—This woman was sold under a guarantee of soundness; under the circumstances, ought the seller or buyer to be the

loser? Did the tumor in the thorax have any influence in causing the death of the patient? If so, how much, and in what manner was this influence manifested or exerted? The woman was evidently unwell at the time of sale, and must have been so for weeks, if not months. Was this unsoundness immediately or remotely the cause of death; an exciting or predisposing cause of puerperal fever? These questions I shall leave unanswered for the present.

This was a case terminating more suddenly fatal, and passing through its different stages quicker, than is often noticed. The pathognomonic symptoms of the disease were more obscure and less appreciable before death than is commonly observed. I have thought the case worthy of being reported on account of its rapid progress to a fatal termination, the obscurity of its symptoms, and the medico-legal questions that may arise in the controversy that will probably ensue in court.—*New Orleans Medical Journal.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 3, 1845.

Influence of Tobacco on Health.—It is well known that two or three years since an investigation was made, by order of the French Government, into the effects of tobacco on the health of the workmen employed in the tobacco manufactories in France. The results of this investigation, tending to show that tobacco was in no ways hurtful to those who were exposed to it nearly their whole lives, have already been given in this Journal. The reports of the investigating committee were handed over to the Academy of Medicine, and a committee was appointed by the Academy to examine the whole subject. Instead of trusting altogether to the documents in their possession, this committee have examined anew the large Government manufactory in Paris, which gives employment to 1200 or 1300 people—the whole number of workpeople in the ten factories in France being about 6000. A very thorough investigation was made by this committee, every step being taken calculated to throw light on the subject, and a report has lately been made by them to the Academy. The results of the inquiry, as shown in this report, are somewhat different from those deduced from the former reports—the difference consisting principally in the Academy's committee finding that the human system continued to be operated on by the tobacco emanations after the initiatory symptoms had disappeared. It is stated that—

"All, or nearly all, workpeople, on their first admission to the manufactory, experience certain symptoms; cephalalgia, nausea, anorexia, insomnia, and often diarrhœa. Generally speaking, these symptoms disappear in the course of eight or fifteen days. With some they do not give way at all, in which case they are obliged to leave the manufactory. The symptoms are more marked in women than in men. When once they have ceased to manifest themselves, the workpeople seldom complain, and are considered acclimated. In reality, however, they continue to experience the effects of the tobacco, as is proved by a change that takes place, in the course of time, in the color of the skin. It gradually assumes a peculiar grayish tinge, which may be said to occupy a medium between the paleness of chlorosis and that of other cachexiæ. This change does not usually take place in less than two years. It may be remedied, like chlorosis, by the preparations of iron, and appears to be owing to some modification that has taken place in the blood, under the prolonged influence of the tobacco. A fact, which seems to show that the blood is modified in these workpeople, is, that when it is abstracted it is seldom buffed, so that it would seem to be partially deprived of its fibrin. Plants (a rose-tree and a primrose) exposed to the emanations of the tobacco, in the work-rooms, died down to the roots, but new shoots sprang up, which seemed endowed with considerable vitality. It appeared as if, like man, they suffered at first from the action of tobacco, but subsequently became inured to it. An orange tree was not injured. Rabbits and birds remained a long while in rooms containing tobacco in a state of fermentation, without being, apparently, inconvenienced.

" From what precedes, it is evident, says the Committee, that the manufacture of tobacco is not a dangerous occupation; at the same time it cannot be considered innocuous. It exercises an evident influence over the health of those who are employed in its manufacture, both at first and at a subsequent period. These effects are, however, diminished by the extreme attention paid to the hygienic arrangements in the royal manufactories. It is impossible, at present, to give an opinion as to whether this kind of labor shortens life; first, from the continued change which is going on in the manufactories, and second, from the want of statistical documents. There are many old men to be found in them, some of whom have worked there from their youth. Most of them, however, seem to be laboring under asthma, or from shortness of breath.

" With reference to any beneficial influence which tobacco may exercise, the Committee state that the workpeople are by its action protected from, and cured of, rheumatic and neuralgic affections. It is also stated, that the manufacture of tobacco preserves them from intermittent fever, and probably from other epidemical diseases, such as dysentery, typhus, &c. Scabies is not met with, and other diseases of the skin are rare. As to phthisis, the Committe does not seem to adopt the views of those practitioners attached to the tobacco manufactories (five out of ten) who think that the tobacco exercises a decided preservative influence over the workpeople. Inquiries, however, are now going on, which which will throw considerable light on this question."

An interesting debate on the whole subject has been elicited from the Academy by the Report of the Committee—one member having noticed asthmatic symptoms among the workmen in smaller tobacco establishments—and probably further facts will be brought to light, though a more favorable opportunity for investigation is rarely offered than was presented to the Committees of Paris.

Massachusetts Medical College.—On the first Wednesday in November, the annual course of medical lectures in this well-established institution will commence. The present faculty have so long been identified with the science of medicine in New England, that any observations upon the individual qualifications of the professors would be entirely superfluous. Their experience and long-tried faithful services are extensively acknowledged.

"Taking into view the amount of instruction given in this school," says the circular, "the splendid and extensive apparatus with which it is furnished, its connection with the numerous cases and operations with one of the best conducted hospitals in the United States, together with the general thorough acquisitions and high respectability of its graduates, it may be doubted whether any seminary in the country offers the means of a more complete professional education, than may be obtained in the Medical School of Boston."

Transactions of the Massachusetts Medical Society.—Within a short time, Part IV. of Volume VII., being the Second Series, Volume III., Part IV. of these Transactions, has been distributed. It is admirably printed, on good paper, and with a type that does one's eyes good instead of harm, to look at. Dr. Walker's discourse on the treatment of compound and complicated fractures, occupies a large part of the present number. An appendix follows, that embraces all the proceedings of the Society at the last meeting, together with a catalogue of all the officers, the counsellors and censors of the different districts, &c., besides reports of committees, and such matters generally in relation to the doings of the association as must always be of interest to the members both in the city and country.

Philosophy of Medical Science.—Reference was made in the Journal, some weeks since, to a review of Dr. Bartlett's work on the Philosophy of Medical Science, in the Southern Literary Messenger for June. Within a few days, through the kindness of some unknown correspondent, the No. containing the article alluded to, has come to hand, and thus an opportunity has beeen afforded for its perusal. In the notice referred to, we gave the name of Mr. J. S. Allan as that of the writer to whom the profession is indebted for a most brilliant, racy, and really admirable paper. Instead of confining himself strictly, however, to reviewing Dr. Bartlett in the way of pointing out excellences, and showing up faults, the Shenandoah critic (for report says he resides in that lovely valley) has produced a masterly dissertation on inductive philosophy. There is a freedom of style, a kind of flexibility in the sentences, that is altogether charming. One who writes so well, and so learnedly too, on the great powers of Lord Bacon, cannot be ignorant of the character and influences exerted on the reflecting part of mankind, by subsequent philosophers, through the period of two hundred years. We thank the gentleman for the entertainment and instruction he has afforded us individually, believing that others feel an equal degree of personal gratitude.

Missionary Hospital at Shanghai, China.—Dr. Lockhart has furnished a few statistical facts illustrative of the immense value of hospitals to the Chinese. The last communication is under date of July 15th, 1844—more than a year ago, but none the less interesting to the philanthropist.

It is nearly time to have further particulars. For the rent of suitable buildings—all together called the Hospital—the Medical Missionary Society pay one half. "The number of individual patients," says Dr. L., "that have been attended to, down to the end of September, namely, during eight months, amounts to 8000 persons; many of these have come from the city and suburbs, but the chief part of them came a distance of several miles, from the towns and villages in ihts vicinity. Many also came from Soochow, Sangkiangfoo, Chin-Keangfoo, and various places along the banks of the Yang-tsze-Keang; and a few have come from Nanking. Indeed, as perhaps might be expected, the longer the work is carried on, the greater are the distances persons travel seeking for medical relief. Those who come from a great distance frequently join together and hire a boat, by which they travel, using it also as their lodging while they remain under treatment: fourteen persons came a few days ago, and at present there is a party of five respectable men living in the house who have come 200 miles. The average daily attendance is about 100, occasionally 140 or 150; besides these there are 20 patients living in the house, who, with their friends, the hospital servants and domestics, make an assemblage of between 30 and 40 every morning at family worship."

Medical College of Ohio.—In March last, 47 gentlemen took the degree of Doctor in Medicine at this Institution. A prospectus for the next course of lectures has appeared, showing that ample and satisfactory preparations have been made for the coming season, which opens at Cincinnati the first Monday in November. Dr. Mussey, of the chair of Surgery, was in Boston last week. Dr. Locke, the professor of Chemistry, is much distinguished for his attainments in a department that should always command the respect of the medical profession.

"Cincinnati," says the Dean, "presents several prominent points of attraction to the student of medicine, who is earnestly devoted to the prosecution of his medical education. First, most abundant material for anatomical investigations is at hand during the winter. Second, the cheapness of living is unsurpassed in any of our larger towns. Third, the finest field for the study of practical medicine and surgery is presented in the large hospital, which, on an average, contains from 150 to 200 medical and surgical cases each day of the year. Over 1500 were treated within its wards during the past year."

Improvement of the Insane in England—Cretinism in Switzerland.—A society for improving the condition of the insane was organized in London, in April, 1842, which has since offered premiums for dissertations. Twenty guineas were given for the best essay on the distinction between crime and insanity; and another of ten guineas for the best form of keeping cases of mental disorder. In 1844–5 a premium for the best essay on the pathology and treatment of puerperal insanity is to be given; and one for the second best on the same subject.

At Abendburg, near Interlachen, a Dr. Guggenbulh has established an institution for the cure and education of cretans—a deformed, imbecile class of beings in the valleys of Switzerland.

Medical Distinction.—A case of some small consequence in regard to the rights of a medical pretender, to collect fees for services, was recently tried in the Court of Common Pleas in Boston. The plaintiff, one Dr. Lambright, says the Boston Post, thus speaks of himself in a printed bill which he sends round the country:—"Dr. L. has *diplomas* from the emperors of France, Russia and Germany, where he has practised with unequalled success. He was for several years *head* surgeon in the French war under Napoleon Bonaparte, and also in America under Jackson"!!

Caledonia Springs, Canada.—E. S. de Rottermund, Esq., Government Chemist, is now at these Springs prosecuting the analysis of the waters His visit is in connection with the geological survey of the Province. From the experiments he has already made, he says that the waters are of a still more valuable character than indicated by the analysis formerly made by Dr. Chilton. Each spring he finds to possess a different medicinal power. One, is iodine; the second, saline-magnesia; and the third (and only one), contains sulphuretted-hydrogen gas. Hence it may be fairly inferred, that the Caledonia Springs consist of three distinct waters; and not of one, as might be supposed from the analysis of Dr. Chilton.

Braithwaite's Retrospect.—No. 11 of this popular synopsis of discoveries and improvements in the medical sciences, embracing the time from January to July, 1845, is ready for the public. We are glad that Mr. Adee, of New York, the publisher, meets with substantial encouragement in the enterprise. Those who have become acquainted with the character of the Retrospect can properly appreciate the service he is doing the profession of this country by his re-prints.

West Feliciana Medical Society.—A meeting of the practitioners of medicine and surgery was held at the Court House in St. Francisville, La., on the 14th of June, for the adoption of rules and regulations for a medical society. A committee, previously charged with the duty of digesting a plan of association, on this occasion made a report, which was adopted. On the subject of medical ethics, the second article makes provision for organizing a committee of honor, whose duty it shall be to receive applications for membership, take cognizance of professional conduct, &c. Article third regards etiquette, &c., and makes ample provision for keeping the peace, provided it should so happen, in the course of events, that any member encroaches upon the rights of others. A synopsis of this subject, by Dr. Cartwright, of Natchez, was introduced almost without alteration, as embodying all that was desirable in medical intercourse. The committee, who have acquitted themselves so satisfactorily in the report, were Drs. Samuel P. Jones, D. B. Gorham and P. B. McKelvey. The latter gentleman was elected President, and Dr. G. W. Prunelle, Recording Secretary.

New Hampshire Medical Society.—The Fellows of the N. H. Medical Society held their fifty-fifth annual meeting in Concord on the 12th day of June, 1845. The meeting was very fully attended. The President, Dr. Batchelder, of Marlborough, read a very able and interesting address on the Duties of Physicians. Dr. Peaslee, of Hanover, and Dr. Carr, of Goffstown, read each a well-written essay on subjects connected with medical science.

The following is a list of officers for the ensuing year:—Dixi Crosby, *President;* Peter P. Woodbury, *Vice President;* Charles P. Gage, *Secretary;* R. P. J. Tenney, *Treasurer.*

Counsellors.—N. Wight, E. K. Webster, J. W. Cowan, J. H. Smith, G. W. Twitchell, S. Cummings, A. O. Dickey, E. R. Peaslee, J. Crosby, T. Brown, J. Bartlett, E. B. Gale, F. P. Fitch, H. Eaton.

Censors.—H. Dickey, C. T. Berry, C. F. Elliot, P. A. Stackpole, E. B. Hammond, A. Smith, A. Twitchell, J. Batchelder, D. Crosby, M. C. Sawyer, D. Flanders, Z. Colburn, T. Bassitt, T. Brown.

Corresponding Secretaries.—J. C. Eastman, Hampstead; T. Wallace, Derry; J. Batchelder, Marlborough; E. R. Peaslee, Hanover; J. Crosby, Manchester; J. B. Abbott, Sanbornton; E. Spaulding, Nashua.

Delegates to Hanover.—J. G. Graves, T. Chadbourne.

Orators for 1846.—J. G. Graves, A. Smith.

Substitutes.—P. P. Woodbury, S. Cummings.

The following were elected Fellows, viz.: William Adams, M.D.; E. B. Hammond, M.D., Nashua; S. Sargent, M.D., Pittsfield: Jeremiah Gates, M.D., Concord; Campbell, M.D.; D. J. Hoyt, M.D., Manchester; H. E. Weymouth, M.D., Andover; B. H. Tripp, M.D., Concord; T. H. Currier, M.D., West Boscawen.

Edward E. Phelps, M.D., Oliver P. Hubbard, M.D., and Joseph Roby, M.D., Professors in Dartmouth College; and Samuel D. Gross, M.D., Professor in the Louisville Medical Institute, were elected honorary members.

The memorial of Dr. Isaac Tewksbury, of Hampstead, who was expelled at the last annual meeting, was indefinitely postponed.

Mesmerism in Ohio.—In the war of rival quackeries, I am sorry to find that therapeutic mesmerism has been "knocked down and dragged out." Whether it is dead or only in a state of somnambulism, *I* cannot say, and *nobody* seems to care. In fact, it appears to be forgotten. This is a great pity, and I hope some one of our mesmerizing readers will be able, by the force of his will, to rouse it into life and action, that it may again take its chance among the grosser charlatanries of the day. If not the least absurd, it is certainly the most harmless of the whole—the most spiritual—and the most auspicious to the tender relations, as it requires the doctor and the patient to be of opposite sexes. One might have thought that this requirement alone would have made it fashionable and preserved its life.—*Dr. Drake's Travelling Letters.*

Hooping Cough.—A correspondent at Ipswich says—Seeing some useful remarks by Mr. Waddington, in the Lancet for June 21st, on this distressing complaint among children, I beg to call his attention, as well as that of the profession generally, to the speedy relief afforded by the following simple remedy, viz., from fifteen to twenty drops of diluted sulphuric acid, P. L., mixed in a teaspoonful of moist sugar, taken three or four times a day. I sometimes prefer giving an ounce of this "elixir" in a pint of water, with two ounces of simple syrup; the dose, a tablespoonful three or four times a day. This popular remedy has been found so useful here, during the last two or three years, as to be considered almost a specific. Permit me also to take the opportunity of calling the attention of the profession to the great utility of emetics, particularly sulphate of zinc, in all cases of *asphyxia*, or suspended animation, as well as in convulsions. —*London Lancet.*

Periostic Tumor, the result of Stumps of Teeth remaining in the Jaw. By H. C. Vanderpant, Esq., Surgeon-dentist, London.—A few months ago, I had under my care a case of severe disease of the upper jaw, produced by caries of the fangs of teeth, which the patient had neglected to have extracted, from apprehension of the suffering. The patient was a female, aged 42. When I first saw her, the features were greatly distorted, the mouth pushed to one side, and her speech rendered imperfect, from a tumor as large as a moderate-sized orange, situated in the upper jaw, and which appeared to arise from expansion of the walls of the antrum. There was a considerable offensive discharge of sanious matter, and the tumor was exquisitely sensitive. From the size and hardness of the tumor, I at first thought it was a case of pure exostosis, but the result of treatment ultimately proved it to be one of periostosis. I first extracted the diseased fangs. and lanced freely the surface of the tumor. I continued to lance the gum over the tumor every third or fourth day, for some weeks, and the result was always a copious discharge of pus and blood. The size of the tumor gradually diminished under this treatment, the features regained their natural shape and expression, and her health, which had previously been impaired, began to steadily improve. After about two months of treatment she recovered thoroughly.—*Ibid.*

Medical Miscellany.—One officer and thirteen seamen of the U. S. Frigate Constitution, had died, at the last accounts, at Singapore.—Sarah Peachors died at Beaufort, N. C., at the age of 107.—A Bokhara worm, over three feet in length, has been extracted from the wrist of the Rev. Dr. Wolff, the intrepid traveller.—Hon. Daniel Waldo, late of Worcester, Ms., in his will, gave the Massachusetts General Hospital, in Boston, $40,000; the Massachusetts Charitable Eye and Ear Infirmary, also in Boston, $6,000.—Dr. Trowbridge, of Watertown, N. Y., has recently opened the bone, in two cases, and instantly relieved the deep-seated pain caused by an inflammation of the periosteum internum, in children, induced by bathing.

Married,—Dr. John Osgood, of Saxonville, Mass., to Miss E. W. Whitney.—In Cummington, Mass., Dr. Charles E. Bartlett, of Pittsfield, to Miss Cordelia Kingman, of C.

Died,—At Gerry, Va., Dr. Alexander Austin, 28, found dead in bed, from an overdose of landanum.

Number of deaths in Boston, for the week ending Aug. 30, 65.—Males, 32; Females, 33. Stillborn, 5. Of consumption, 3—disease of the bowels, 9—old age, 2—smallpox, 1—cholera infantum, 8—scrofula, 1—delirium tremens, 1—typhus fever, 4—diarrhœa, 1—infantile, 5—accidental, 2—cholera morbus, 1—hooping-cough, 3—dropsy on the brain, 3—canker, 2—inflammation on the brain, 1—paralysis, 1—inflammation on the lungs, 3—scarlet fever, 3—marasmus, 1—debility, 1—dropsy, 2—suicide, 1—worms, 1—convulsions, 2—mortification, 1—drowned, 2.

Under 5 years, 39—between 5 and 20 years, 5—between 20 and 60 years, 18—over 60 years, 3,

Proceedings under the Vaccination Act in England. (From the Poor-Law Commissioners' last Report.)—It was with regret that we perceived, last year, from the Registrar-General's Quarterly Tables of Mortality, that the deaths from smallpox continued on the increase, notwithstanding the extent to which vaccination was carried on throughout England and Wales.

Towards the end of the year we caused returns to be transmitted to us from the several unions and parishes, stating the numbers vaccinated during the year ending 29th September, 1844. We have since received returns from 542 unions and parishes.

The births in the 542 unions from which returns were received (after estimating the births for those unions the returns for which were imperfect) amounted to 452,000. Of the children born in 1842, about nine per cent. died under the age of three months. Assuming, therefore, that the ratio of deaths under that age in the 542 unions, during the year ended 29th September, 1844, was the same; 39,300 children died in that year *before* attaining the age at which vaccination is usually performed. This leaves 412,891 children to be vaccinated in the year. It appears that there were about 290,000 persons vaccinated by the public vaccinators, leaving only about 122,400 children to be vaccinated by private medical practitoners, and at public institutions.

Whenever we found that the births in any union greatly exceeded the numbers vaccinated, we requested the guardians to call the attention of the vaccinators to the subject, with a view to further extend vaccination in their districts; and where few or none had been vaccinated at the appointed stations, we suggested that the vaccinators should visit the poorer classes, for the purpose of vaccinating any unvaccinated children. We have also the satisfaction of learning, from the vaccinators, that although many of the more ignorant are still averse to their children being vaccinated (from the apprehension that other eruptive diseases may thereby be communicated to them), the prejudice does not now prevail to so great an extent as in previous years.

The public vaccinators return 3,954 cases of smallpox attended by them during the year, out of which they state that 1,283 were previously vaccinated.

Of the 290,000 persons vaccinated, the vaccinators returned 278,000 as successful; so that, of the total number vaccinated, only four per. cent. proved unsuccessful.

The mortality from smallpox in England and Wales, during the years 1840, 1841, and 1842, was as follows:—1840, 10,434; 1841, 6,368; 1842, 2,715.

The fees paid to the public vaccinators in England and Wales, during the year ended 25th March, 1844, amounted to 16,694*l.*, being an increase of 675*l.* upon the amount paid in the previous year.

The Vaccination Act in Ireland, although not duly carried into effect by the guardians of many unions, has nevertheless obtained a wide and beneficial operation, which we trust is in course of gradual extension. The amount expended for vaccination, in the year ending 29th September, 1844, in all the unions in Ireland, exceeded 4,000*l.* The usual rate of payment was 1*s.* on each successful case, for the first 100 cases in the year; and 6*d.* on each successful case, for the remainder.